Arab Republic of Egypt
Ministry of Health and Population

FAMILY PLANNING / REPRODUCTIVE HEALTH/MCH

PHYSICIANS SERVICE PROVIDER
(BASIC UNIT)
TRAINING CURRICULUM

Module 6. *REPRODUCTIVE HEALTH SERVICES*

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Reproductive Health Services

Definition of Reproductive Health and Reproductive Rights

Reproductive health is a state of complete physical, mental and social well being and not merely the absence of disease and infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe marital life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.

Implicit in this last condition are the rights of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility which are not against the law, and the right of access to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.

Reproductive rights rest on the recognition of the basic right of all couples and individuals to decide freely and responsibly the number, spacing and timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health. They also include the right of all to make decisions concerning reproduction free of discrimination, coercion and violence.

Reproductive Health Examination

Reproductive health counseling depends on the client's age, RH status and complaint. It must include in detail the following information:

1. Counseling to adolescents about changes in their reproductive biology, nutrition and hygiene.
2. The RH conditions to which clients are vulnerable and the health and social impact of these conditions
3. The necessary preventive measures
4. The roles of husband and wife to achieve and sustain RH

Gender roles limit not only women, but men as well. Men have distinct reproductive health needs of their own. It is important that men have a place with a welcoming atmosphere to discuss sexual and reproductive health issues and receive services.

Men also play an important role in the health of women and children, often serving as gatekeepers to women's access to reproductive health services. Men's participation activities should seek to promote women's equality in RH decision-

making; to increase men's support of women's sexual and reproductive health and of children's well-being; and to meet the reproductive and sexual needs of men. Men need to have their perspectives included in program design, to feel welcome at clinics, to have a wider range of information and services available and to be portrayed positively.

General Medical Examination and Screening

Physicians working in all MOHP service provision facilities must promote the periodic reproductive health medical checkup to all clients attending the facilities as a means of early diagnosis of serious diseases and conditions. They are responsible for conducting the periodic reproductive health medical checkup with all clients who agree to undergo the check-up and all vulnerable clients.

Steps:

Create a Medical Record for All Clients

The record keeping system should be reorganized in each MOHP facility for easy recording, handling, storage and retrieval of medical records for all clients seeking health services—in addition to the existing family planning forms.

Follow-up appointments must be set during the first visit.

Note: Assure clients that all medical records will never be accessible to others and that their information will be private and confidential.

The following information comprises the essential components of the medical record:

Identifying information

1. Date of visit
2. Client number
3. Client name
4. Client address/telephone number (if applicable)

Demographic information

1. Age
2. Education
3. Occupation
4. Duration of marriage

Past history

- History of medical diseases or operations
- History of previous gynecological diseases or operations
- History of urinary symptoms such as frequency of micturition or dysuria
- Obstetric history

Obstetric History

Number of pregnancies	Write all data in the medical record and ask about any complications related to pregnancy, labor or puerperium such as bleeding, infection or puerperal sepsis, or difficult labor
Number of live births	
Number of stillbirths	
Number of abortions	
Number of living children	
Age of youngest child	
Age of oldest child	

Menstrual history

- Regularity of cycle
- Duration and amount of menses
- Pain during menses (dysmenorrhea)
- Inter-menstrual discharge (amount, character, smell, and associated itching)
- Date of last menstrual period

Family planning history

- Previous use of FP methods
- Current use of a FP method
- Duration of use
- Any side effects, complications, or failures encountered during previous or current method use

Risk Factors Assessment

1. **Assess risk factors for breast cancer**

- Family history of breast cancer
- Smoking
- History of using hormones
- Menstruation after age of 55 or before age of 12
- Obesity
- Uterine cancer
- First pregnancy after age 30 or no pregnancies

2. **Assess risk factors for cervical malignancy**

- Age at first marriage (younger than 18)

- History of Sexually Transmitted Diseases (STDs) particularly infection with the human papilloma virus and development of condylomata accuminata.
- Post menopausal vaginal bleeding
- Smoking
- Multiple sexual partners or male sexual partner who has other partners (to be asked only in special circumstances. Requires special skills)

3. Assess risk factors for reproductive tract infections.

- Ask female/male client about:

Female

- Delivery or miscarriage within past four weeks
- Vaginal discharge
- Itching or sores in or around vagina
- Pain or burning when urinating
- Lower abdominal pain
- Multiple sexual partners or husband having multiple sexual partners (to be asked only in special circumstances: requires special skills)
- If husband complains of symptoms

Male:

- Swollen testicles or penis
- Discharge from the urethra
- Open sores anywhere in the genital area
- Pain or burning during micturation
- Multiple sexual partners (to be asked only in special circumstances. Requires special skills).
- Wife had any recent discharge or has been treated for any genital or urinary problem

Note: Positive data should be registered and described in the medical record.

Medical Examination

Results of the medical examination should be recorded in detail:

- **General examination**
  - Temperature
  - Pulse
  - Blood pressure
  - Weight/height
  - Eye (Pallor or jaundice)

  - Heart
  - Chest
  - Oedema in lower limbs
  - Varicose veins
  - Breast (and breast self-examination teaching)
- **Abdominal examination**
  - Distention
  - Enlarged liver or spleen
  - Masses
  - Hernia(s)
  - Scars
- **Pelvic examination**
  - Vulval inspection (for evidence of circumcision, inflammation(s), cysts, papillomata, ulcers, masses, abnormal discharge and prolapse)
  - Bimanual examination (to detect abnormal tenderness or masses in the uterus or adnexae)
  - Speculum examination (to detect abnormal discharge, cervical infection, erosion, or masses)

Investigations

Routine investigation(s) (to be performed on all women):

- Wet vaginal smear (especially for women with vaginal discharge)
- Urine examination
- Full blood picture

Investigations to be done when required (refer client to a specialist):

- Pap smear
- Mammography
- Examination of the vaginal discharge by Gram stain if gonorrhea is suspected
- VDRL if syphilis is suspected
- ELIZA for HIV/AIDS or hepatitis
- Hormonal assay
- Bone densitometry
- Blood lipid profile
- Blood sugar estimation

Adolescent Health

The adolescent needs to be informed about the changes his/her body is going through and the importance of hygiene, exercise and good nutrition in keeping healthy.

The provider should bear in mind the psychological changes of adolescence and be appropriately sensitive when counseling.

Nutritional Education and Counseling

The aim of nutritional education and counseling is to increase the individual's awareness, knowledge, skills, and motivation for healthy dietary choices. The educational process is especially dependent on the practitioner's knowledge of adolescent growth and development, and understanding of dietary patterns, malnutrition risk and chronic disease status.

Dietary Guidelines

The basic principles of good nutrition are:

- Eat a variety of foods. This is important because less than half of the essential nutrients for humans have been studied in sufficient detail to provide a scientific basis for recommended dietary allowances (RDA). The best defense against nutrient deficiencies and excesses is to vary the intake among many foods from diverse food groups.
- Maintain a healthy weight by balancing energy intake with output. This is the most difficult nutritional task for adolescents. Encouragement of more physical activity is critical in maintaining good body weight and composition.
- Choose a diet low in fat, saturated fat and cholesterol. This is important for prevention of chronic disease in adulthood as well as obesity in adolescents.
- Eat plenty of fruit, vegetables and whole grains to maintain the nutrient density of the diet and ensure good bowel habits.

The food pyramid guide comprises a bread, cereals and pasta group with 6 - 11 recommended servings per day; a vegetable group with 3 - 5 servings; the fruits group with 2 - 4 servings; the dairy product group with 2 - 3 servings; a meat, poultry, fish and legumes group with 2 - 3 servings; and at the top of the pyramid, fats, oils and sweets, to be used sparingly.

Nutritional counseling strategies for adolescents

The strategies for nutritional counseling for adolescents are based on the following principles:

- Using a non-judgmental, non-critical approach
- Recommending small increments of change
- Using a contract and incentive system

- Using simple, culturally sensitive terms
- Stressing food, not nutrients
- Discussing food choice, amounts and preparation methods
- Building on positive aspects of the current diet
- Explaining that all foods can be eaten in moderation
- Addressing barriers to change
- Providing positive support and encouragement
- Being aware of cultural, socioeconomic and psychological factors influencing diet and exercise patterns

Nutrient Requirements of Healthy Adolescents

- Nutritional requirements vary with genetic and metabolic differences.
- For adolescents, the basic goal is to achieve satisfactory growth and avoid deficiency states. Good nutrition helps prevent acute and chronic illness, develop physical and mental potential and provide reserves for stress.

Energy

The need for sufficient energy to support the adolescent's increased physical activity and accelerating growth is paramount in understanding adolescent food habits and nutrient needs.

Protein

If energy intake is sufficient, then protein intake becomes the next most important nutrient. The protein requirement for adolescent is about 12-14% of the total energy intake.

Fat

Fat serves as a concentrated source of energy (9 kcal/g) in the diet, as well as a vehicle for the fat soluble vitamins and as a source of essential fatty acids.

Carbohydrates

Carbohydrates provide the main source of energy for adolescents and should comprise about 55% of energy intake, mainly in the form of whole grains, breads and pastas (complex carbohydrates), which are also an important source of dietary fiber. They also function as sweetening agents and are important to the neuroleptic characteristics of foods.

Minerals

Calcium

Quantitative estimates of the calcium requirements are controversial in adolescence, as more data is accumulated on the effects of dieting, amenorrhea and athletic competition on bone mineralization and osteoporosis, however, ninety-seven percent of the body's calcium is contained in the skeletal mass, which grows dramatically during adolescence. Therefore, intakes of calcium must be increased to meet requirements during the adolescent period.

Therefore, advise adolescents to drink milk, and eat cheese and leafy vegetables.

Zinc

Zinc deficiency, leading to growth retardation and pubertal delay, will respond to dietary supplementation. Therefore, advise adolescent to eat grains, meat, cheese and nuts.

Vitamins

- The data on which vitamin requirements are based is more limited than that for minerals. Given the growth requirements of adolescence, the need for vitamins involved in anabolism and in energy production must be assumed to be greater. Other factors that may alter nutritional requirements are: (i) physical activity; (ii) pregnancy; (iii) oral contraceptives and (iv) chronic illness.
- Vitamin A intake is often low among adolescents and the body's need for it at this stage in life is thought to increase, because of its role in cellular proliferation and differentiation and in growth.
- Vitamins B, including pyridoxine, riboflavin, niacin and thiamin, are important in cellular energy metabolism and therefore important for growth.
- Vitamin C is essential for synthesis of collagen and therefore requirements should parallel the growth spurt; unfortunately, dietary sources such as fresh fruit and vegetables are often lacking in the diets of adolescents.
- Vitamin D is critical in calcium absorption and bone mineralization. Folate is important for DNA synthesis and therefore critical to adolescents.

Micro-nutrient Supplementation

The most important micro-nutrients are iron, iodine, selenium, and zinc.

Iron Deficiency

Iron requirements increase during adolescence, because the rapid growth of lean body mass increases demand for iron as part of myoglobin. The increased androgens of puberty in males stimulate erythropoietin, resulting in increased haemoglobin, increasing sexual maturity.

Clinical picture of iron deficiency

Symptoms of iron deficiency may be subtle and non-specific. They include increased tiredness or lethargy, headache, dizziness, palpitations, shortness of breath, decreased exercise performance, susceptibility to infection, and school or behavioral problems. Screening is therefore recommended once for the adolescent without risk factors.

Treatment

Treatment consists of dietary counseling to increase intake of iron-rich foods and to be sure that vitamin C intake is adequate.

Ferrous sulfate (100 mg elemental iron/d orally) supplements should be given. Iron should not be taken simultaneously with dairy products, other calcium rich foods, or with coffee, tea or bran.

The reticulocyte count should show a brisk response following the institution of iron therapy with a peak at 10 days to two weeks after the initiation of treatment and the hemoglobin should respond in one month.

Iodized Salt

Increasing iodine intake through the programs of salt iodization at a level of 10 to 60 parts per million (ppm) prevents disorders induced by iodine deficiency. Depending on the intake of salt, the level of iodination should be calculated in such a way that salt should provide an additional 75 to 150 ug/day of iodine.

Smoking

The Scope of the Problem

Children that start tobacco use at an early age are most likely to continue smoking in adult life. The message "tobacco kills" accurately highlights the seriousness of this.

Nicotine as a Psychoactive Drug

Addiction to nicotine is a common consequence of tobacco use. A puff of a cigarette results in peak brain nicotine levels within 10 seconds, activating the brain circuitry that regulates pleasure and increases dopamine in the reward circuits. Ninety percent of those who will become regular smokers start smoking before age 19, and dependence is common after smoking as few as 100 cigarettes. Nicotine dependence is a primary, chronic disease with genetic, psychosocial, and environmental factors influencing its development and manifestations.

Dangers of Tobacco Use

Consequences of smoking include increased incidence of upper respiratory infection, cough, asthma, sinusitis, cardiovascular disease, cancer, impaired fertility, premature aging and death, as well as loss of time from work and school. Smoking in children and youth has been shown to interfere almost immediately with both growth and functioning of the lungs. These dangers also apply to smoking shisha.

Risk Factors for Initiation of Tobacco Use

Initiation of tobacco use is more closely associated with environmental factors, while progression from the first cigarette to additional cigarettes appears more influenced by personal and pharmacologic factors. The socio-demographic factors of low socioeconomic status, low level of parent education, and being in the transition years between elementary and high school (ages 11-16 years) correlates closely with initiation. Protective factors in the individual, family and environment that can guard against risky behaviors such as tobacco use include close communication with parents, positive parental support, high self-esteem, assertiveness, social competences, school success, and a strong sense of right and wrong—factors that can be encouraged in the context of a clinic visit.

Guidelines for Providers to Address Tobacco

1. Anticipate: provide age-appropriate education to parents and children. Compliment children and youth who are nonsmokers.
2. Ask: inquire about tobacco use by parents, children, and youth, and record it prominently in the client's chart or in the problem list.
3. Advise: use clear, personal, relevant messages to advise parent and youth who use tobacco to quit.
4. Assess: assess if the tobacco user is ready to quit. Use motivational interviewing techniques and repetition to encourage those not yet ready to quit to consider quitting.
5. Assist: target self-help and referral information to those who are ready to quit

Guidelines for Providers to Address Tobacco 1

Providers are urged not to smoke or use tobacco products and should maintain a tobacco-free office environment and attempt to limit reading materials containing tobacco advertising. They should be firm advocates of non-use by children and parents and advocate a smoke-free environment wherever children are present.

Guidelines for Providers to Address Tobacco 2

Hospitals, medical offices, schools, childcare programs, and other places frequented by children should maintain a tobacco-free environment.

Guidelines for Providers to Address Tobacco 3

PREMARITAL PACKAGE

The Premarital package consists of:

a. Advocating the Premarital package and providing counseling
b. Premarital Examination
c. Premarital Investigations
d. Premarital immunization

Advocating the Premarital package and providing Counseling

- Tell couple about: -
  a. The importance of premarital counseling and examination
  b. The value of premarital counseling and examination in preventing
     - Rh incompatibility
     - Hazards of German measles infection during pregnancy
     - STIs including AIDS
  c. Any detected illnesses
  d. Anatomical facts concerning the male and female genital organs
  e. Reproductive physiology (physiology of menstruation and pregnancy)
  f. Family planning methods suitable for recently married couples (condom, pills, spermicides, and barriers)
  g. The most common preventable disorders e.g. Rh incompatibility and Down's syndrome.
  h. The age suitable for conception

- Help couples to discuss their thoughts and fears freely.
  - Discus any concerns raised by the couple

- Provide information about the wedding night:
  - Reassure the couple and deal with all worries and concerns
  - Minimal pain results from defloration that does not need any precautions or force.
  - Minimal bleeding usually results from defloration.
  - Information about the act of sexual intercourse, particularly the foreplay.
  - Lubricants can facilitate the first coitus
  - Narcotics (Hashish) and alcoholics have an adverse effect on the sexual relations.

Premarital Examination

- Take the History from the Couple: Ask couple about:
  a. Medical diseases such as diabetes, tuberculosis, hypertension, STIs..etc
  b. Previous operations: laparotomy, varicocele, hydrocele, or hernia.
  c. Menstrual history: age of menarche, regularity, duration, amount, dysmenorrhea, vaginal discharge, and date of last menstruation.

d. Family history of hereditary diseases.

- Premarital Examination

General examination: Look for the following

1. Signs that may indicate endocrine disturbances
   - Very short stature: may indicate Turner's syndrome or pituitary dwarfism (this condition can be associated with menstrual troubles or infertility)
   - Very tall: may indicate Gigantism (this condition can be associated with menstrual disturbances or infertility)
   - Size of the breasts and condition of the nipples
   - Abnormal obesity, hirsuitism
2. Signs of general diseases:
   - Cachexia (TB – chronic renal illness..etc)
   - Signs of anaemia
   - Skin lesions
   - Heart disease
   - Diabetes
   - Hypertension

Abdominal examination: Look for the following:

- Distribution of pubic hair
- Abdominal masses
- Scars

Inspection of the external genital organs: Look for the following

1. The female
   - Genital ulcers (herpes, syphilitic ulcers, soft sore, granuloma inguinale, or lymphogranuloma venereum) or papillomata
   - The condition of the labia minorae and clitoris, evidence of circumcision.

Vaginal examination is not to be conducted in virgins

2. The male
   - Genital ulcers (herpes, syphilitic ulcers, soft sore, granuloma inguinale or lymphogranuloma venereum)
   - Urethral discharge
   - Hypospadias or undecended testicles

Premarital Investigations:

- Rh grouping: If the girl is Rh – ve and the husband is Rh + ve: Explain to the couple that Anti D gamma globulin should be given during the seventh month of pregnancy followed by another dose after each labour or abortion.
  - Inform couple that the Rh – ve female should never receive Rh-positive blood transfusion.

- Complete Blood Picture
- Urine for albumin and sugar
- Refer for other investigations (if needed) such as:
- VDRL for syphilis
- ELIZA for hepatitis or HIV

Premarital Immunization:

- Unless admitted by the female that she was immunized against German measles, advise immunization against German measles at least three months before marriage. This avoids any possible infection by Rubella during pregnancy with possible development of serious teratogenic effects and congenital malformations in the foetus.
- Advise couple to be vaccinated against Hepatitis.

EARLY DETECTION OF CANCER BREAST AND CERVIX

Cancer screening (early detection of cancer) involves testing people who are asymptomatic to detect hidden or pre-clinical diseases. The rationale for screening is that if diagnosis is made early and treatment undertaken before development of signs or symptoms of the disease, the results of treatment will be much better than when diagnosis is made after the signs and symptoms become clinically evident.

General rules of cancer screening

Rule 1. Cancer screening must be considered for the majority of women attending the clinic for any reason

Rule 2. Cancer breast and cervix are the most important tumors to be screened for.

Rule 3. All Patients/clients should know the importance of cancer screening

Rule 4. Visual inspection of the cervix after painting with acetic acid (VIA) and observe for aceto-white areas should be done for all women above age of 30 years attending the clinic once annually. Give the report to the patients/clients and keep a copy in the medical file

Rule 5. Women in whom aceto-white area or a white area after painting with 2% iodine solution or who have a suspicious lesion on the cervix should be referred to hospital.

If any abnormality is detected by VI, VIA, or iodine test refer to hospital

Rule 6. Explain and train all Patients/clients to perform Breast self-examination and instruct them when and how to do it.

Rule 7. Instruct all Patients/clients about the abnormalities to be looked for during Breast self-examination and to report to the physician if she notices:

- Breast lump or nodule
- Lump under the arm or above the collarbone
- Persistent skin rash, flaking, or eruption near the nipple
- Dimpling, pulling, or retraction in one area of the breast
- Nipple discharge
- Sudden change in the direct of the nipple.
- Unusual prominence of the veins over either breasts

Rule 8. Examine the breasts once every year to detect any masses and refer to hospital if needed.

Rule 9. Maintain good communication channels with the Patients/clients whose screening shows suspicious results (telephone – address – whom to be contacted) to ensure that follow up can be achieved

Screening for cancer breast

a. Create a medical record

General data as explained in Reproductive Health Medical Checkups

b. Ask about risk factors

- Family history of breast cancer
- Menstruation after age of 55 or before age of 12
- Menstrual cycles for more than 40 years
- Hormone administration
- Obesity
- Smoking
- Previous uterine cancer
- First pregnancy after age 30 or no pregnancies.

c. Physician must examine the Patient/Client breasts annually:

Explain to the Patients/clients the importance of breast examination as a tool for early detection of abnormalities specially cancer that result in better prognosis

Inspection:

- Explain the procedures to the Patient/Client, and ask her to undress to the waist and stand relaxed.
- Ask the Patients/clients to put her hands on her waist, and to push inwards to contract chest muscle.
- Inspect both breasts for any puckering, abnormalities of the skin, change in the nipple such as swelling or retraction, asymmetric appearance, or nipple discharge
- While Patients/clients lie on her back, inspect breasts to detect any abnormalities.

Palpation:

- Palpation of breast tissue for any breast masses as well as the axilla, and supraclavicular area for any enlarged lymph nodes.
- Be sure that all parts are felt carefully.
- Milk the nipple after massage of the areola medially to identify any fluid discharge (Describe as none, clear, milky, pinkish, or dark-bloody color).
- If any abnormality is detected by examination, refer to hospital.

d. Educate self breast examination to Patients/Clients:

- Tell Patients/clients to conduct breast self-examination once every month after the end of menstruation starting at the age of 20 years for life.
- Instruct Patients/clients to self-examine their breasts as follow:
  - Undress to the waist and stand relaxed, in front of a mirror, in good light, with your arms by your side.
  - Turn from side to side to have a complete view of the breasts and nipples.
  - Do not hurry; look at your breasts carefully and pay special attention to any changes in size and shape; alterations in the surface of the breast such as swelling, dimpling, rash, discoloration of the skin or very prominent veins and note the direction of the nipples and whether they are turned in.
  - With your hands on your waist, look at your breasts; turn from side to side, push your hands inwards towards the hips until you feel your chest muscles tighten. Look again at your breasts as previously described while you keep pressing.
  - Place your hands lightly on the top of your head and again look at your breasts carefully. This position emphasizes any differences in size or shape of the breasts.
  - Stretch your arms high above your head; this emphasizes any differences between the two breasts.
  - Finally, squeeze each nipple gently to check for any bleeding or discharge.
  - Lie down comfortably on a firm surface with your head on a pillow. Put a folded towel under your shoulder blade, slightly raising the side that you are examining. This helps to spread the breast tissue, making it easier to examine. Use your right hand to examine your left breast and vice versa. Examine one breast at a time.
  - Use the flat of the fingers of your hand and not the fingertips. Keep your fingers flat and close together. If you press too hard it will dull your sensations and, if you press too lightly, you will not be able to feel deeply enough. With a little practice you will be able to use the right degree of pressure.
  - Never rush palpation of the breasts; it must be done slowly, gently, and thoroughly. Start from the collarbone above your breast. Press the breast gently but firmly towards the body. Move your fingers in small circles, working right around the outside of the breast and feel gently for any unusual lump or thickening. When you reach the starting point, work round again in a slightly smaller circle. Continue to do this systematically until you have felt the whole of the breast. This may take two or three complete circles depending on the size of your breast. Any unusual discrete lumps or nodules should be noted.
  - It is important to note the normal consistency of your breasts at the first examination so that you will be aware of any changes in subsequent examinations.

- If you detect any of the following, you should come to the clinic immediately:
    1. Breast lumps
    2. Lumps under the arms or above the collar bone
    3. Persistent skin rash, flaking or eruption near the nipple
    4. Dimpling, pulling, retraction in one area of the breast
    5. Nipple discharge
    6. Sudden change in nipple position

You may recommend palpation of the breasts during bathing. Soap and water on the skin facilitates palpation of the breast tissue.

Screening for cancer cervix

a. Create a medical record.

General data as explained in Reproductive Health Medical Checkups

- *Ask about risk factors*
    - Early start of sexual intercourse at a young age
    - Multiple sexual partners (in special circumstances. Need extra skills).
    - Male sexual partner having other partners (in special circumstances. Need extra skills).
    - Clinical history of infection by Human Papilloma Virus or the presence of condylomata acuminata.

- *Visual Inspection after Acetic Acid Painting (VIA) or after painting with 2% Iodine solution to be applied to all women above 35 years*

    The objective of the aided visual inspection is solely to be able to recognize clinically normal areas that do not stain with acetic acid or stain with iodine. Refer abnormal looking cases with areas that stain white with acetic acid or do not stain brown with iodine to hospital for further evaluation and diagnosis and appropriate treatment.

    The aim is to detect and treat cervical dysplasia in asymptomatic women to prevent development of invasive cervical cancer.

<u>Equipment required</u>

1. Examination table
2. Sterile speculum
3. Sterile rubber gloves
4. Source of light, a lamp or a torch
5. Cotton swabs
6. Forceps
7. Syringe for acetic acid lavage or a cotton swab to paint the cervix
8. Acetic Acid in a dilution of 3-5%
9. Stationary, to record examination findings

The Procedures

1. Carefully explain the procedure and the reason for doing it to the woman to be examined.
2. Put patient in the lithotomy position
3. Good visualization is essential. Direct the light source to the genital area.
4. Observe and record any abnormal findings in the external genitalia.
5. Lubricate the speculum with warm water and insert it into the vagina.
6. Open the speculum and adjust the light source so as to get a clear view of the cervix.
7. If there is excess mucus or discharge, clean it with a cotton swab soaked in normal saline solution.
8. Observe any abnormal findings.

9.a. Apply acetic acid (3-5%) to the cervix, then dry the cervix and inspect it.
   - Acetic acid positive areas stain white
   - Acetic acid negative areas do not stain white
     Refer women with acetic acid positive areas to hospital for further evaluation and treatment

9.b. Or paint the cervix with a 2% aqueous solution of iodine
   - Iodine negative areas look white
   - Iodine positive areas stain brown

Refer women with negative iodine areas to hospital for further evaluation and treatment

THE MENOPAUSE AND HORMONE REPLACEMENT THERAPY

Definition of Menopause and Climacteric:

Menopause: The term menopause is applied to the cessation of menstruation that may be abrupt or preceded by a period of hypomenorrhoea or oligohypomenorrhea.

Climacteric: The climacteric is the period during which there is gradual decline in the ovarian function.

Any irregular or excessive bleeding at this period should be considered as pathological until proved otherwise

Create a medical record for each Patient/Client:

Specially ask all Patients/clients about the following symptoms: -

- Hot flushes and sweating
- Nervous symptoms such as irritability, depression, headache and insomnia
- Rheumatic pains or history of bone fracture
- Flatulent dyspepsia and constipation
- Unusual increase in weight
- Pain or dryness during sexual intercourse
- Changes in libido.

Conduct a full general, abdominal, and pelvic examination specially noting for the following:

- Any breast abnormality or mass.
- Vaginal atrophy or dryness
- Genital prolapse

Counseling:

Communicate with Patients/clients the following facts about the menopause (climacteric)

1) Inform Patients/clients that the climacteric is a physiological process and that some women only experience symptoms.
2) Reassure the patients/clients who experience one or more of the following related symptoms that they may be due to the menopause:
   - Hot flushes and sweating

- Nervous symptoms such as irritability, depression, headache and insomnia
- Rheumatic pains
- Tendency to flatulent dyspepsia and constipation
- Increase in weight
- Changes in libido
- Dryness of the vagina

3) Inform Patients/clients that the menopause usually occur at the age of 45-50 years but may occur earlier or later.
4) The menstruation rarely stops abruptly, usually it is delayed every month, and the amount diminishes gradually until it stops.
5) Any abnormal bleeding or bleeding after cessation of the menstruation should be immediately reported to your physician
6) The climacteric symptoms occur as a result of diminished ovarian functions (hormone secretions)
7) The bone density may decrease some years after the menopause with increased tendency to bone fractures
8) The climacteric symptoms last for few months but may last for years and usually disappear spontaneously after few years when the body is accustomed to its new hormonal status.
9) Advise Patients/clients about the following:
   a. Avoid obesity by regulation of diet
   b. Exercise (as walking)
   c. Increase calcium intake
   d. Avoid smoking
   e. Take care to avoid fractures
10) Inform Patients/clients that hormone replacement therapy may be indicated only in certain cases to compensate for the diminished hormone secretion by the ovaries and that this type of therapy is to be advised by a gynecologist.
11) Inform Patients/clients that they need a periodic medical checkup every year even after cessation of menstruation

Management of the menopause:

(if the menopausal woman needs a treatment, refer her to Ob/Gyn specialist)
In addition to the previous general measures, the following medications may be prescribed when needed:

1. Mild hypnotics, sedatives or tranquilizers
2. Calcium, vitamin D
3. A Combination of Estrogen and Androgen: a small dose helps prevention of hot flushes and induce a sense of well-being.

- The frequency of injection can be reduced gradually
- It can cause virilising effects.

4. Hormone Replacement Therapy (HRT). To be prescribed only by specialists.

Hormone Replacement Therapy:

Potential benefits of HRT:

a. Relieve menopausal symptoms

b. Help prevention of:

- Skin atrophy and vaginal dryness
- Osteoporosis
- ??Coronary heart diseases

Potential risks of HRT:

a. Post menopausal bleeding

b. Thromboembolic diseases

c. Uterine and breast cancer

Balancing the risks and benefits

Practitioners must clinically evaluate Patients/clients in order to select the best candidates for HRT with a good chance for maximum expected benefits and minimum risks.

Refer to a specialist.

Messages to Patients/clients about HRT

- HRT has no relation to cancer cervix
- Women having following conditions should not use HRT: -
  1 . Family history of breast cancer
  2 . Breast mass
  3 . Undiagnosed vaginal bleeding
  4 . History of cerebro-vascular disorders and strokes
  5 . Severe headache and or migraine
  6 . Liver diseases

It should also be noted that an essential requisite for starting HRT is that women should present for annual medical checkup examination and mammography.

MANAGEMENT OF INFERTILITY

Definition:

There are two types of infertility

1. Primary infertility: Inability to get pregnant after one year of continuous marital relation
2. Secondary infertility: Inability to get pregnant for one year after last delivery or abortion.

Principles of management:

1. Both husband and wife should participate in the infertility work up.
2. Privacy is crucial in communicating with the infertile couple
3. Infertility management needs special, secured, and detailed filing system in which details of the history, results of examination and investigation as well as treatment modalities are carefully recorded in details.
4. History taking, clinical examination, treatment of relevant gross pelvic lesions and counseling can be started anytime the couple present for treatment. However, investigations should not be started except after one year of continuous marital relations.
5. Semen analysis for the husband should precede any investigation for his wife that should never be started except after the result of husband semen analysis is available.
6. Treatment should not be started except after all basic investigations are performed and an accurate diagnosis is reached. These include: -
   - Semen analysis
   - Tubal patency test
   - Ovulation detection test.
   - Laparoscopy is considered as a basic investigation by some protocols to determine tubal patency and to exclude local pathology.

   (There is debate as regards the value of the Post-coital test).
7. It is important that both husband and wife be treated even from minor abnormalities.
8. Remember that about 30% of couples get pregnant after simple history taking, examination, investigations and counseling without starting any treatment.
9. Remember that unnecessary treatment of husbands or wives withdraw on available resources and can do harm or affect future fertility.
10. You can contribute to lowering the incidence of infertility and prevent some cases of infertility in your community by:
    - Providing education on the prevention, symptoms, and importance of early treatment of Reproductive Tract Infections (RTIs) and Sexually Transmitted Diseases (STDs).
    - Integration of diagnosis and treatment of RTIs and STDs in the reproductive health package.

- Providing better obstetric and post-abortion care especially as regards infection prevention measures.
- Providing contraceptive knowledge and services to prevent unwanted pregnancies that may end in induction of abortion.
- Educate clients about the possible harmful effects of folk methods to treat infertility particularly using pessaries and vaginal tampons and undergoing unnecessary procedures or operations that can interfere with future fertility.
- Don't overestimate the role of some local pelvic conditions such as retroversion flexion, small fibroids, non-infected cervical ectopy, double uterus etc…. In most cases, these are not the cause of infertility.
- Educate mothers about the possible hazards of female circumcision.
- Avoid the use of IUDs in nulliparae.

Management of the infertile couple:

Proceed in this order:

History taking from the wife:

Personal history	- Age. - Period of marriage.
Menstrual history	- Age of menarche - Regularity of menstruation - Duration of the menstrual flow. - Amount of the menstrual flow. - Associated Dysmenorrhea. - Vaginal Discharge. - Date of last menstruation
Obstetric History	- Previous pregnancies, labours, or abortions - The occurrence of puerperal infection.
Coital History	- Frequency - Severe premature ejaculation or other coital difficulties. - Post-coital douching.
Past history	- Previous treatment (RTI and STD). - Gynecological operations - Laparotomy.

Examination of the wife:

a. General Examination.
   - Abnormal obesity, body contour.
   - Distribution of hair and hirsuitism.
   - Development of the breasts.
   - In addition to a systematic general examination.

b. Abdominal examination:
   - Pubic hair distribution.
   - Abdominal scars
   - Abdominal masses.

c. Pelvic examination
   - Female circumcision
   - Abnormal vaginal discharge.
   - Cervical infection.
   - Uterine or adnexal tenderness or masses.

If any abnormality is found, refer to hospital for further investigations and treatment.

History taking from the husband

- History of:	Mumps, Operations (Hernia, hydrocoele) RTI or STDs.
- Habits	Smoking. Alcohol or drug intake.
- Coital history	Frequency Severe premature ejaculation or other coital abnormalities

Examination of the husband

- Evidence of endocrinopathology (severe obesity etc…)
- Undecended testicles
- Size of testicles, varicocoele
- Hypospaduis

If any abnormality is found, refer to hospital for treatment.

Semen analysis:

1. Instructions should emphasize:
   - Sexual abstinence for 5 days.
   - All the ejaculate should be collected by masturbation in a wide container.
   - If sample taken at home, it should be carried in outside pocket (at ordinary temperature) and bring it immediately to laboratory.
   - The husband should perform at least one semen analysis (mandatory).
   - If any abnormality is detected, no treatment should be started except after repetition of the semen analysis, 2 weeks apart is the best.

2. Normal Semen Picture: According to WHO standards, normal semen should be as follow:
   (a) Spermatozoa Concentration:
      - More than 20 millions / ml
      - Motility: more than 25% grade (A) motility OR more than 50% grade (A) and (B) motility
      - Morphology: more than 30% normal head forms
      - Less than 10% of motile spermatozoa are antibody coated and no agglutination

   (b) Seminal plasma:
      - Volume: more than 2.0 ml
      - Normal appearance and consistency
      - pH between 7.2 and 7.8
      - Biochemistry: normal
      - White blood cells: less than 1 mill/ml
      - Culture: negative, i.e. less than 1000 bacteria per ml.
3. Wide variations are observed among normal men.
4. If semen analysis show any abnormality, refer to hospital for further management

If all the previous findings are normal, refer the patient and her file to hospital for investigation of the wife by performing:

i. Tubal patency test: eg. "Hysterosalpingography".
ii. An ovulation test: eg.
   - Monitoring by ultrasound.
   - Premenstrual endometrial biopsy
   - Recording the basal body temperature

iii. Laparoscopy may be needed in certain cases in order to be able to reach a definite diagnosis.
iv. In some cases: Hormone assays (eg. Prolactin, FSH, LH. , Estrogen, Progesterone)
v. Hysteroscopy in selected cases

POST-ABORTION CARE

Information on spontaneous and induced abortions (miscarriages)

Spontaneous abortion:

Is unplanned or natural loss of a pregnancy before 20 weeks gestation. Spontaneous abortion occurs approximately in 15 – 20% of pregnancies. They often occur because of congenital anomalies of the developing fetus. It is difficult to prevent this type of miscarriage and in case it is repeated, investigations should be conducted to exclude medical problems.

Induced abortion:

This is planned abortion where the pregnant woman purposely acts to end a pregnancy before 20 weeks gestations. Induced abortion may result in severe infection due to use of septic instruments or tools, it may result in severe uncontrolled bleeding that leads to death of the woman.

In all cases of abortion, whether spontaneous or induced, quick management of the woman is necessary to prevent complications or even death.

Important signs of abortion:

- Bleeding per vagina and/or
- Cramping pain in the lower abdomen.

As post-abortion women had achieved an unfavorable outcome of their pregnancy, the event is considered as emotional and traumatic to both mother and her family. The woman is in need of **proper counseling** to understand the possible reasons of her abortion as well as enhancing her recovery status.

Accordingly, management of post abortion cases has 2 broad components, a counseling component, and a surgical component.

Management of post-abortion cases

<u>Information and rules for post-abortion patient's counseling.</u>

Proper counseling of the post-abortion cases depends on the following:

- Clear and open two-way communication
- Assure the women of the confidentiality of her health status
- Ensure privacy during patient's administration.
- Provide the post-abortion women with information:
  a. Before (Pre-operative counseling)

b. During (Intra-operative counseling for patient under local anesthesia)
c. After treatment (Post-operative counseling).

a. Pre-operative counseling:

Before operative intervention, communication is important in order to:

1. Take full medical history.
2. Provide the woman with information about her health condition and explain to her the surgical procedure that would be conducted.
3. The woman should be informed about the timing of operation, as well as timing of discharge.
4. She should be informed that she would receive the necessary advices before her discharge.
5. Health providers should allow the woman to express any fears; she may have about her condition or treatment and should provide her with the necessary reassurance.

b. Intra-operative counseling:

Only done if the operative intervention is done by manual vacuum aspiration under local anaesthesia. During the procedure, the woman should be told what is happening to her and what she might feel during operation. A counselor or nurse needs to stand beside her during the operative intervention.

c. Post-operative counseling:

After completion of the surgical procedure, and before discharge the woman and preferably her husband as well should know:

- What are the signs of a normal recovery
- What activities are prohibited during recovery
- What the woman should do if she experiences symptoms of a complication.

Before discharge from the health care facility, post-abortion women are in need of special requisites before returning to every day life. These include:

1- Need for rest and nutrition: post-abortion women need rest but they don't need to stay in bed. They should be advised to eat foods rich in iron and folate to prevent anaemia.
2- Return to work and activities gradually: Most women need a period of rest before returning to normal activity. This period vary according to the duration of pregnancy and any complications that had occurred such as bleeding or infection. Most women should not return to hard work except one week after abortion.
3- Ensure personal cleanliness
4- She could resume sexual intercourse only after 2 weeks and that pregnancy can occur after that period.
5- She should be helped to choose an appropriate method of family planning and to use a reliable method by two weeks after abortion if she is serious to avoid pregnancy.

Warning Signs of Serious Post-abortion Problems

1. Before discharge, all post-abortion women should know that if any of the following symptoms occurs, she should consult the PHC physician:
   i. Vaginal bleeding
   ii. Fever and sweating
   iii. Offensive vaginal discharge
   iv. Severe abdominal pain
   v. Extreme fatigue, and pallor
   vi. Difficulty with eating and sleeping and/or extreme sadness

2. Primary health care providers should refer postpartum patients with any of the following signs to the nearest hospital as soon as possible:
   i. A fast, weak pulse, sweating, pale, or cool skin, and confusion denoting shock.
   ii. High fever, severe abdominal pain, and/or foul smelling vaginal discharge are likely signs of a pelvic infection.
   iii. Bleeding problems which may be signs of incomplete abortion or a tear in the cervix or vagina, include:
   iv. Severe abdominal pain, and a distended or hard abdomen may be signs of a perforation in the uterus,
   v. Extreme fatigue, pale conjunctiva, pale lips, and pale fingernails are signs of anemia.
   vi. Difficulty with eating and sleeping and extreme sadness may be signs of serious depression.

Family Planning counseling following post-abortion treatment

1. Treat the woman with respect.
   - If she does not feel well, counsel her later when she feels better.
   - Show concern for her feelings and her experience.
   - Keep counseling in a private atmosphere.

2. Find out about the woman's needs and situation.
   - Ask the woman if she wants to become pregnant again soon.
   - Ask if she has practiced family planning before and if there were any problems during use or counsel her about the preferred method to use.

3. Provide the information that is appropriate for her.
   - Help her get her preferred contraceptive method if she had not already started.
   - Do not pressure her if she wants to get pregnant again soon.
   - Make follow-up appointments or referrals for any other reproductive health problems or needs.

4. Every woman treated for abortion complications needs to know the following facts

- She could leave herself to become pregnant again right away.
- She can delay or prevent another pregnancy by using a family planning method.
- Her health care provider can help her get and use a family planning method.

General rules for surgical management.

Surgical management of post-abortion patients aims at evacuation of the uterus of remnants of conception that could be a source of continuous bleeding, infection, and even sepsis and shock that might lead to death.

Surgical management (evacuation) of the uterus is conducted either by the Dilatation and Curettage techniques (D&C) under general anesthesia or by using the Manual Vacuum Aspiration (MVA) under local anesthesia.

REPRODUCTIVE TRACT INFECTIONS AND SEXUALLY TRANSMITTED DISEASES

Definition and Terminology

The terms genital tract infections (GTIs), sexually transmitted infections (STIs), and sexually transmitted disease (STDs) are sometimes used when caring for women in the clinical setting. In considering which definition to use in the context of this initiative, some observations might be made:

- Many women who suffer from a vaginal infection do not have a sexually acquired nor a sexually transmissible infection. Infections such as vaginal or perineal monilial (yeast) infections are "endogenous" in nature. Certain environmental factors can assist the "fungus" to seat itself and then to "invade" the host.
- Pelvic Inflammatory Disease can originate as a sexually acquired infection (i.e. Gonococci or Chlamydia) or as a pregnancy-related or contraceptive-related occurrence.
- The use of the word "infection" as opposed to disease can lead to considerable discussion. Proper use of language would favor use of the term infection, but tradition favors the use of the word disease. In general the name is important only to be consistent in training, and general communication, so that we all understand one another and the clients understand what we are talking about.
- Urinary tract infections form a significant clinical area requiring diagnosis and treatment in women because Bilharziasis is endemic in Egypt.

Classification of RTIs

- Endogenous
    - Candida Albicans
    - Bacterial Vaginosis
- Pregnancy-related
    - Obstetric-related
    - Abortion-related
- Iatrogenic
    - Female circumcision
    - Cystitis
- Sexually transmitted
    - Bacterial
        - Chlamydia
        - Gonorrhea
        - Syphilis
        - Chancroid
        - Granuloma Venereum
    - Yeast
        - Candida Albicans
    - Viral
        - Herpes

        - Human Papilloma Virus (HPV)
        - AIDS
        - Hepatitis B
    - Protozoal
        - Trichomonas

Reproductive Tract Infections (RTIs) Counseling

- Explain early symptoms and warning signals of RTIs to vulnerable clients, and explain the importance of early diagnosis and treatment.
- Ask clients to report to the clinic if they feel one of the following symptoms:
    - Unusual vaginal discharge
    - Burning or pain during micturition
    - The appearance of ulcers, vesicles, or rash on or around the genitalia
    - Vulval itching
    - Unpleasant (offensive) odor
    - If husband complains of burning micturition, ulcers on the genital area, discharge from the penis or itching in the genitalia
- Tell clients that not all RTIs are sexually transmitted.
- Explain the significance of husband referral for evaluation and treatment if indicated.
- Explain that compliance with the prescribed treatment and behavior is crucial for achieving a cure.
- Instruct about ways to prevent RTIs and STIs; promote the use of condom as a tool to prevent the spread of STIs; explain the proper use.
- Instruct client about the schedule for follow-up visits.

Approach to Diagnosis and Treatment

The Syndromic Management Approach supplemented with simple laboratory tests is recommended. This approach is characterized by:

- Diagnosis is based mainly on symptoms and signs.
- Treatment is provided during the client's first visit.
- Prescriptions should include the appropriate drugs, accurate dosage, and amount necessary to complete the course of treatment.
- Health education, prevention, counseling, condom promotion, adherence to treatment and partner referral are all recommended as an integral part of effective management.
- If necessary, refer for more advanced laboratory tests (laboratory approach) and further sophisticated laboratory investigations.

Steps for the Syndromic Management Approach

1. Fill in a medical record
2. Conduct a complete physical examination
    a. Clients should be examined in a private place, and the physician should always wear disposable gloves.
    b. Infection prevention procedures should be taken to protect service providers and clients.
    c. All equipment used must be appropriately sterilized if not disposable.
    d. Examination should include the following:

        i. Abdominal examination
        ii. Inspection of external genital organs
        iii. Bimanual examination
        iv. Speculum examination

3. Counseling
    a. All clients need to be informed about RTIs and other STIs. The four Cs are considered crucial in the treatment of anyone diagnosed with a STD.
        i. Condom Use with every intercourse
        ii. Counseling Male and Female
        iii. Contacts examination and treatment
        iv. Compliance with treatment and instructions
    b. Common symptoms of RTIs and STDs
    c. Prevention measures, particularly the use of condoms
    d. The need to return if they do not get better and at the end of treatment to ensure cure before resumption of sexual intercourse
    e. The importance of partner referral for evaluation or treatment if needed
    f. The importance of compliance with medical treatment to ensure cure and to avoid the development of resistant strains of microorganisms.

Categories of Diagnosis and Treatment Approach

Vaginal discharges

Assess Vaginal Discharge

	Candida Albicans	Bacterial Vaginosis	Trichomoniasis	Acute Cervicitis
Discharge Description	White, curd-like	Thin, grey Non-purulent	Thin, frothy	Purulent Yellow Abundant
Symptoms	Vulvar itching	Fishy smell	Vulvar itching	Pelvic pain with coitus Urinary symptoms
Ph		> 4.7		
Wet smearı		Whiff test Amine smell (fishy smell)		
KOH 2	Cotton panties Personal hygiene	Take meds Personal hygiene	Take meds Husband Rx	Take meds Husband examination Transmission
Specific Counseling Advice	4 Cs Conditions for return visit	4 Cs Conditions for return visit	4 Cs Conditions for return visit	4 Cs Conditions for return visit
General Advice		Whiff test Amine smell (fishy smell)		

1. Immerse a cotton swap moistened with vaginal discharge in a test tube containing 1 ml warm normal saline. Stir, then place one drop of the solution on a slide and place a cover. Examine at once under low power microscope.

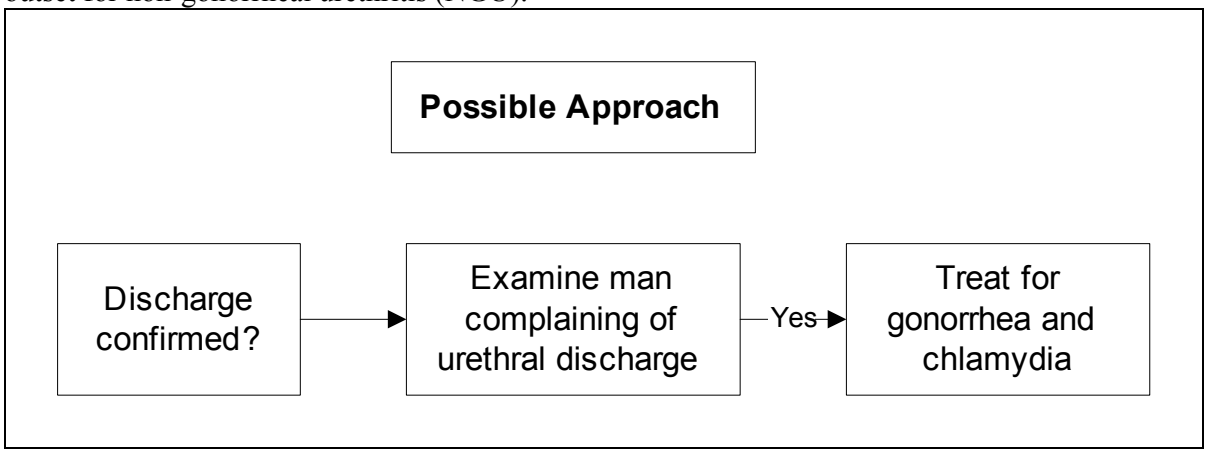
2 Add one drop from the test tube containing normal saline mixed with vaginal discharge to a clean dry slide, then add one drop of 10% potassium hydroxide. The test is positive if a fish-like odor ensues.

Treatment for Abnormal Vaginal Discharge

Candida Albicans	Bacterial Vaginosis	Trichomoniasis	Acute Cervicitis
Choose one of the following: Mycostatin vaginal tablets 100,000 unit once daily for 14 days Myconazole (Daktrin) 200 mg vaginal suppositories once daily for 3 days OR 100 mg once daily for 7 days Clotrimazol (Canestin) 500 mg vaginal tablets single dose OR 100 mg vaginal tablets once daily for 7 days OR 200 mg once daily for 3 days Ketoconazole (Nizoral) 400 mg orally, once daily for 5 days	Choose one of the following: Metronidazole (Flagyl) 2 grams as a single dose OR 500 mg tablets twice daily, for 7 days Clindamycin (Dalacin C) capsules 150 mg. Every 6 hours for 5 days. Clindamycin vaginal cream 2%, daily for 7 days	Choose one of the following: Metronidazole (Flagyl) 2 gm orally as a single dose Metronidazole (Flagyl) 500 mg tablets orally twice daily for 7 days	Possible gonorrhea or clamydia Ofloxacin (Tarivid) 400 mg. orally twice daily for 7 days

Management of Urethritis

In Egypt there are very few cases of gonorrhea, thus the treatment would be only at the outset for non-gonorrheal urethritis (NGU).



Algorithm: Urethral Discharge

Treatment of NGU

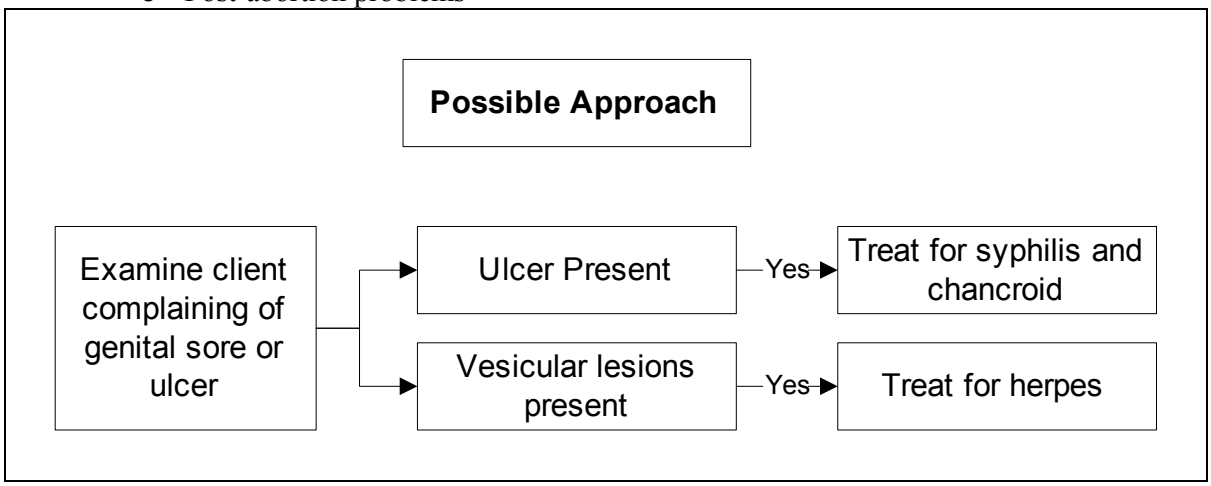
- Antibiotics (choose one):
  - Doxycycline (Vibramycin) capsules 100 mgm. Twice daily for 7 days
  - Ofloxacin (Tarivid) 300 mg. orally twice daily for 7 days
  - If client is pregnant:
  - Amoxycilin 500 mg. orally t.d.s for 7 days OR
  - Erythromycin 500 mg orally every 6 hours for 7 days
- Ask about relevant symptoms for the husband
- Ensure the 4 Cs

  Counseling
  Compliance
  Contact tracing
  Condom

Note: If discharge persists, refer to specialist for further evaluation.

Management of Genital Sore

- If client complains of genital ulcers, differentiate between:
  - Herpes Simplex
  - Chancroid (caused by Ducrey bacillus)
  - Granuloma Venerium (caused by Donovan bodies)
  - Syphilis
- Use the following tables and figures as outlined below as guidelines.
  - Urethritis (use the standard WHO Syndromic approach)
  - Genital ulcers (use the standard WHO/CDC chart)
  - Abdominal pain
  - Post-abortion problems



Algorithm: Genital Ulcer

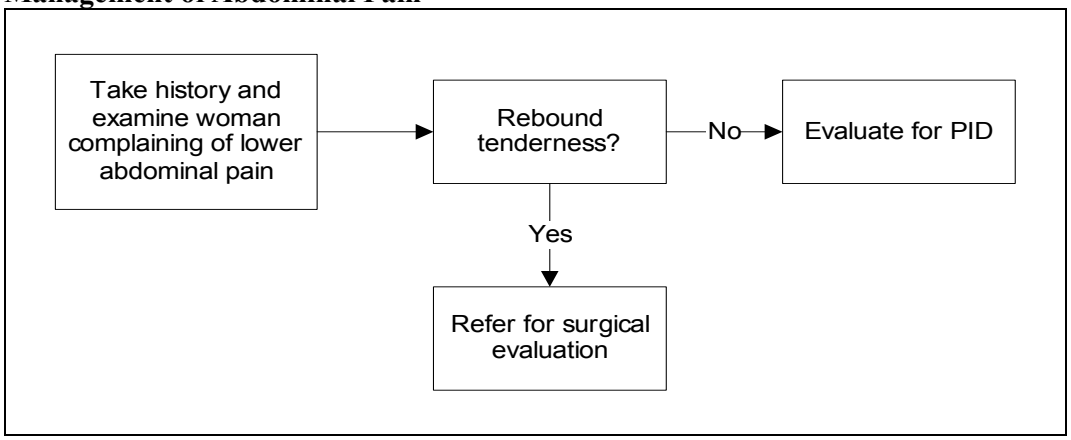
Genital Ulcers

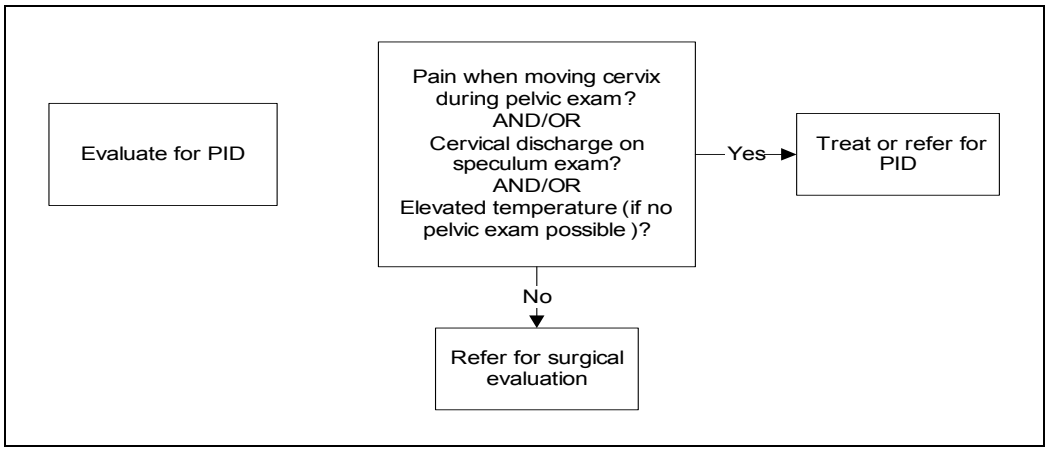
Herpes Simplex	Chancroid	Granuloma Venerium	Syphilis
Recurrent episodes of painful blisters on vulva, vagina, penis or anus	Soft painful sore on vagina, penis, or anus. Swollen lymph glands in groin area	Usually a nodule erode to form granulomous ulcers	Painless ulcers on genital area, rectum, mouth

Genital Ulcers (Management)

Management of Herpes	Management of Chancroid	Management of GV	Management of Syphilis
Acyclovir (Zovirax) 400 mg orally, 3 times a day for 7days Pain control using aspirin, acetamenophen or ibuprofen Avoid intercourse when lesion(s) are present	Chose one of the following antibiotics Azithromycin 1 gm orally as a single dose Erythromycin 500 mg every 6 hours for 5 days Ciprofloxacin 500 mg twice daily for 3 days	Chose one of the following: Sulphamethoxa-zole (Septrim) two tablets orally twice daily Doxycyclin 100 mg twice daily for 3 weeks Ciprofloxacin 750 mgm. Orally twice daily Erythromycin 500 mgm orally 4 times daily	Benzathine Penicillin 2.4 million units intra-muscularly as a single dose
If no cure after specified period, refer to the Ob/Gyn specialist			

Management of Abdominal Pain

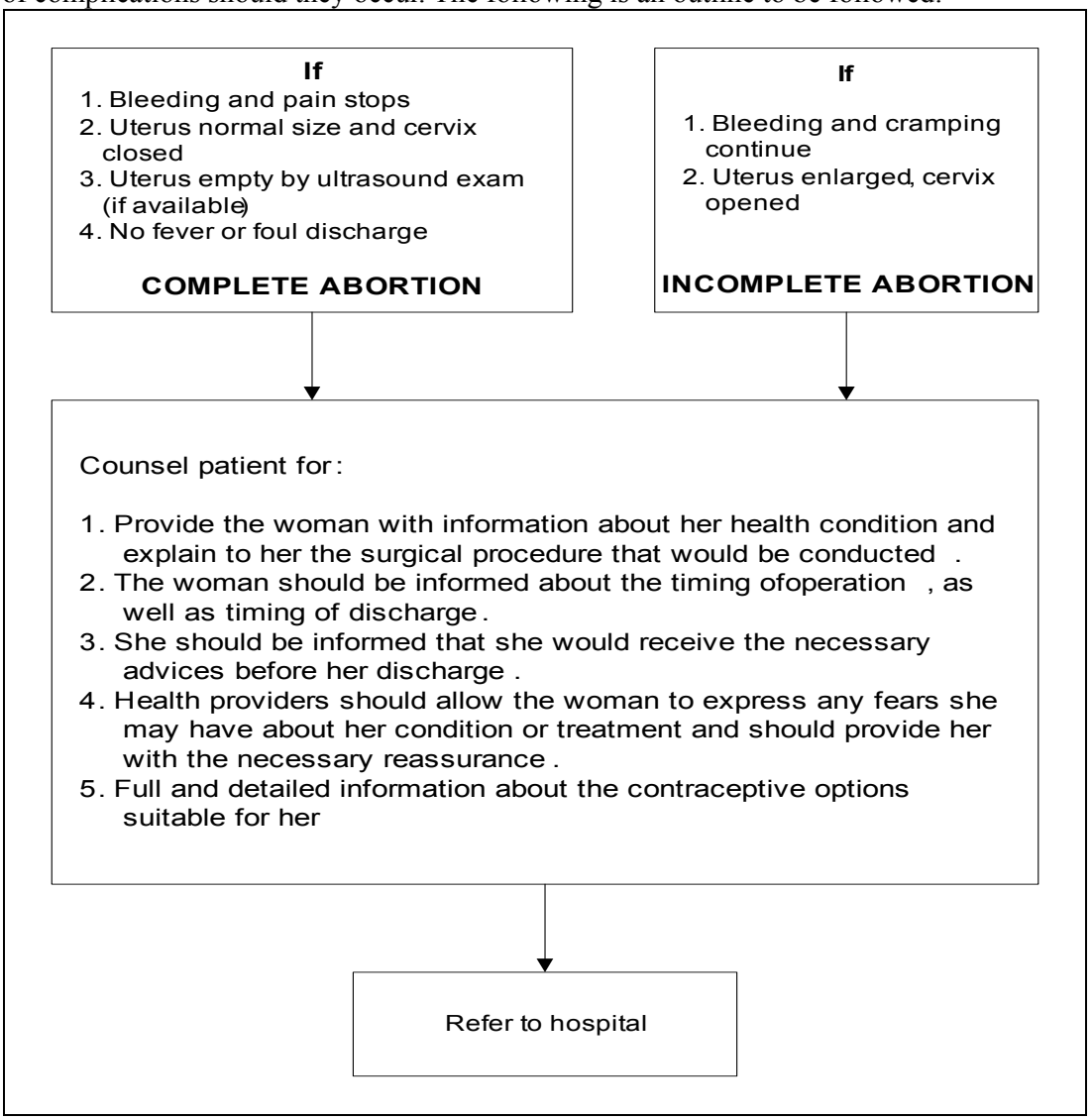




Lower Abdominal Pain: Algorithm (Continued)

Management of Post Abortion Problems

If the woman is pregnant and complains of bleeding or cramping either as a result of a spontaneous abortion or induced abortion, she will need evaluation and possible treatment of complications should they occur. The following is an outline to be followed:



Management of Post Abortion Problems